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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,044	03/30/2004	Krishnasamy Anandakumar	TI-29999.1	7801

23494 7590 06/17/2008

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EXAMINER	
LERNER, MARTIN	
ART UNIT	PAPER NUMBER
2626	

NOTIFICATION DATE	DELIVERY MODE
06/17/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/815,044	ANANDAKUMAR ET AL.	
	Examiner	Art Unit	
	MARTIN LERNER	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *281 to 292* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *281 to 283, 286 to 289, and 292* is/are allowed.

6)☒ Claim(s) *284 to 285 and 290 to 291* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/12/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 281 to 292 are objected to because of the following informalities:

Independent claims 281 to 292 are somewhat inconsistent in terminology of first and second stages, sometimes referring to them as “a first stage” and “a second stage”, sometimes as “a primary stage” and “a secondary stage”. Applicants should provide proper antecedent basis by consistently referring to the stages either as “a first stage” and “a second stage” or as “a primary stage and "a secondary stage".

Independent claim 285 is somewhat confusing in referring to “a first set of every other fixed codebook pulse datum from the remaining fixed codebook pulse data” insofar as “the remaining” fixed codebook pulse data lacks antecedent basis and is inconsistent with the “a first set” being considered as “remaining”. It is appropriate to consider "a second set” of data as “remaining”, but not data of “a first set”, because the data of “a first set" defines what is included, and not what is remaining.

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 284, 285, 290, and 291 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 4 of U.S. Patent No. 6,801,499. Although the conflicting claims are not identical, they are not patentably distinct from each other because the corresponding claims set forth equivalent limitations directed to receiving audible speech, converting the audible speech into frames of 10 milliseconds, forming Linear Prediction Coding data, Long Term Prediction lag data, parity check data, adaptive and fixed codebook gain data, and fixed codebook pulse data, which are placed into sequential packets, wherein the fixed codebook pulse data for every other fixed codebook pulse are transmitted in a first packet and the fixed codebook pulse data for the remaining fixed codebook pulses not represented in the first packet are transmitted in a second packet. Moreover, claim 4 of U.S. Patent No. 6,801,499 defines first and second stages of the packets, where data for every other fixed codebook pulse data are placed in a first stage of a first packet and remaining fixed codebook pulses not represented in a first packet are placed in a

second stage of a second packet. Implicitly, packets of audible speech are sent over a Voice over Internet Protocol (VoIP) network.

Allowable Subject Matter

4. Claims 281, 282, 283, 286, 287, 288, 289, and 292 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter:

Independent claims 281, 282, 283, 286, 287, 288, 289, and 292 appear allowable because the prior art of record does not disclose or reasonably suggest the claimed process and circuit of multiple description data partitioning, where fixed codebook pulses are partitioned between first and second stages of sequential packets, and where a packet includes a parameter of parity check data. It is known to send packets of speech data including linear prediction coefficients, long term prediction (or pitch) lag, adaptive and fixed codebook gains, and adaptive and fixed codes for Voice over Internet Protocol (VoIP). Moreover, some applications include parity bits to check for transmission errors. Generally, though, it is not disclosed or reasonably suggested by the prior art to partition fixed codebook pulses between packets.

Specifically, the prior art of record does not disclose the limitations of independent claims 281 and 287, where only Linear Prediction Coding data, Long Term Prediction lag data, parity check data, and adaptive and fixed codebook gain data are included in a secondary stage of a second packet, implying that fixed codebook pulse data is excluded from the secondary stage.

Specifically, the prior art of record does not disclose the limitations of independent claims 282 and 288, where Linear Prediction Coding data, Long Term Prediction lag data, parity check data, and adaptive and fixed codebook gain data are included in a secondary stage of a second packet, and only a first few of the fixed codebook pulse data is included in the secondary stage.

Specifically, the prior art of record does not disclose the limitations of independent claims 283 and 289, where Linear Prediction Coding data, Long Term Prediction lag data, parity check data, and adaptive and fixed codebook gain data are included in a secondary stage of a second packet, and all the fixed codebook pulse data is included in the secondary stage.

Specifically, the prior art of record does not disclose the limitations of independent claims 286 and 292, where Linear Prediction Coding data, Long Term Prediction lag data, parity check data, adaptive and fixed codebook gain data, and a first set of fixed codebook pulse data are included in a primary stage of a first packet, and Linear Prediction Coding data, Long Term Prediction lag data, parity check data, adaptive and fixed codebook gain, and a second set of fixed codebook data not in the first set are included in a secondary stage of a second packet, in combination with weighted error minimization.

6. Claims 284, 285, 290, and 291 would be allowable upon submission of an acceptable terminal disclaimer to obviate the nonstatutory double patenting rejection.

7. The following is a statement of reasons for the indication of allowable subject matter:

Independent claims 284, 285, 290, and 291 appear allowable because the prior art of record does not disclose or reasonably suggest the claimed process and circuit of multiple description data partitioning, where fixed codebook pulses are partitioned between first and second stages of sequential packets, and where a packet includes a parameter of parity check data. It is known to send packets of speech data including linear prediction coefficients, long term prediction (or pitch) lag, adaptive and fixed codebook gains, and adaptive and fixed codes for Voice over Internet Protocol (VoIP). Moreover, some applications include parity bits to check for transmission errors. Generally, though, it is not disclosed or reasonably suggested by the prior art to partition fixed codebook pulses between packets.

Specifically, the prior art of record does not disclose the limitations of independent claims 284 and 290, where Linear Prediction Coding data, Long Term Prediction lag data, parity check data, adaptive and fixed codebook gain data, and a first set of every other datum of the fixed codebook pulse data are included in a primary stage of a first packet, and Linear Prediction Coding data, Long Term Prediction lag data, parity check data, adaptive and fixed codebook gain data, and a second set of fixed codebook pulse data not in the first set are included in a secondary stage of a second packet.

Specifically, the prior art of record does not disclose the limitations of independent claims 285 and 291, where Linear Prediction Coding data, Long Term

Prediction lag data, parity check data, adaptive and fixed codebook gain data, and a first set of every other datum of the fixed codebook pulse data are included in a primary stage of a first packet, and Linear Prediction Coding data, Long Term Prediction lag data, parity check data, adaptive and fixed codebook gain data, and a second set of remaining fixed codebook pulse data not in the first set are included in a secondary stage of a second packet.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Anandakumar et al. ('757), Shepard, Anandakumar et al. ('267), Anandakumar et al. ('256), Anandakumar et al. ('904), Anandakumar et al. ('532), Anandakumar et al. ('244), Kondo et al., and Anandakumar et al. ("Efficient CELP-based diversity schemes for VoIP") disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN LERNER whose telephone number is (571)272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin Lerner/
Primary Examiner
Art Unit 2626
June 10, 2008